Appendix 2 - Wrangell Island Project Road Cards

Introduction

The purpose of the road cards is to document site-specific resource concerns and mitigation measures regarding the road construction portion of the proposed project. The road cards are intended to serve as an implementation and monitoring tool, as described in the Forest Service Handbook (1909.15-2015-1).

Each road card represents a national forest system (NFS) road proposed for construction or reconditioning by the Wrangell Island Project based on the desired condition defined by the Forest Plan. The road cards are presented in numerical order and each includes a narrative page(s) and a map page, which are described in more detail below.

Some adjustments to the road design can be expected during implementation to better meet site-specific resource management and protection objectives. Adjustments and changes will be documented and analyzed in a change analysis prepared by an interdisciplinary team considering individual and cumulative effects to ensure that actual implementation remains within the scope of the original NEPA decision. The District Ranger will review and make a recommendation to the Responsible Official on whether the changes represent a substantial change, significant new circumstances, or new information relevant to environmental concerns. The Responsible Official will then determine necessary actions based on the Environmental Policy and Procedures Handbook (FSH 1909.15, Chapter 10).

Note: Temporary roads do not have individual road cards since these roads are intended for short-term use. See Unit Cards for more information on temporary roads.

List of Roads

The following is a list of NFS roads included in the Selected Alternative by number, road type and length.

Table 1. List of National Forest System (NFS) roads included in the Selected Alternative

Road Number	Road Type	Miles
6276	New Construction	0.3
50024	New Construction	1.1
50030	Recondition	0.7
50030	New Construction	0.7
50060	Recondition	0.6
50087	New Construction	0.2

Narrative Page

Each road card narrative page contains information used to describe site-specific road construction activities, resource concerns and mitigation measures.

Road Card Header

Each road card has a header block with information used to generally describe the road's number, length, location on the local road system, and land use designation. Each header block contains the following information:

- Road Number - A unique identifying number is given to every NFS road

- Road Name - Some NFS roads have names
- Local System - The local system for the Wrangell Island Project roads is the Wrangell Island system
- Land Use Designation - From the Forest Plan, the land use designation (LUD) in which that road would be located
- Beginning Terminus - A reference point to describe the beginning location point of the existing and/or proposed road
- End Terminus - A reference point to describe the endpoint location of the existing and/or proposed road
- Segment - Some roads are divided into multiple segments segregated by Objective Maintenance Level.
- Begin MP - The road milepost representing the beginning of a road segment.
- End MP - The road milepost representing the ending terminus of a road segment.
- Segment Length - Length of the road segment in miles, to the nearest tenth of a mile.
- Status - Description of the road segment status on the landscape and based on the proposed action (examples: 'Planned' is a new proposed road, while 'Existing' indicates an old road prism that exists on the landscape for planned reconditioning)
- OBML - Objective Management Level, from the Forest Plan

General Design Criteria and Elements

The design criteria for construction, operation, and maintenance of all roads will follow the "National Core" Best Management Practices, which provide specific direction regarding the implementation of this project's proposed activities. A crosswalk to compare the "National Core" Best Management Practices with "Region 10" Best Management Practices is located in Table 2, at the end of this introduction.

Terms used in this section include:

- Functional Class – The grouping of roads by the character of service they provide.
- Level of Service – A description of the roads significant traffic characteristics and operating conditions. The level reflects a number of factors, such as speed, travel time, traffic interruptions, freedom to maneuver, safety, driver comfort, convenience, and operating cost.
- "J" – Represented on all these road cards indicates: Traffic flow is slow and may be blocked by management activities. Two-way traffic is difficult, backing may be required. Rough and irregular surface. Travel with low clearance vehicles is difficult. Single purpose facility.
- Service Life – The length of time that a facility is expected to provide specified service.
    - "C" - Long Term Service. Continuous or annual recurrent service.
    - "I" - Intermittent Term Service. A road which is closed to vehicle traffic between periods of use. The closed period must exceed 1 year.
- Surface – Description of road surface material.
- Width – Width of the "drivable surface" in feet.
- Lanes – Number of lanes.
- Design Speed – The design speed is used to determine the design elements and design standards of a road.
- Critical Vehicle – A vehicle type typically the largest on a road by weight, size, or unique configuration, whose limited use on the road is necessary to fulfill the Road Management Objectives. An example is a semitrailer truck pulling a "Lowboy" trailer.

- Design Vehicle – A selected vehicle, with representative weight, dimensions, and operating characteristics, used to establish the design controls for the road. The design vehicle is Logging Truck.
- Primary Maintainer – The agency or party having primary (largest share) financial responsibility for road maintenance.

Maintenance Criteria

The Objective Maintenance Level is used to describe the existing condition for each road segment. While the Operational Maintenance Level represents a more 'current' status for a particular segment of road, the actual condition of the road may vary due to other programmatic road uses and routine maintenance that may occur at any time. The following definitions are summarized from Forest Service Handbook 7709.58, Section 12.3 - Transportation System Maintenance.

1. Operational Maintenance Level is the maintenance level currently assigned to a road considering today's needs, road condition, budget constraints, and environmental concerns. It defines the level to which the road is maintained.
2. Objective Maintenance Level is the long-term maintenance plan for the roads considering future road management objectives, traffic needs, budget constraints, and environmental concerns.
    - Maintenance Level 1 (ML 1) - Closed to vehicular traffic, but may be managed for Off Highway Vehicles (OHV) as motorized trails in some cases.
    - Maintenance Level 2 (ML 2) - Open for use by high clearance vehicles.
    - Maintenance Level 3 (ML 3) - Open for standard passenger car.

Alaska Forest Resources and Practices Act Class: All roads will be maintained as Active during timber harvest-related activities. One of the following maintenance classes will be implemented after timber harvest-related activities have been completed:

- Active - A forest road actively used for hauling logs, pulpwood, chips, or other major forest products, or rock and other road-building materials.
- Inactive - A forest road on which commercial hauling is discontinued for one or more logging seasons, and the forest landowner desires continuation of access for fire control, forest management activities, occasional or incidental use for forest products harvesting, or similar activities.

Storage Category - Refers to the level of closure activity a road would receive.

- "A" refers to roads that have minimal closure devices. They typically have drivable waterbars, rolling dips, and existing drainage structures and bridges are retained.

Traffic Management Strategies Allowed Uses

This table describes options for managing traffic on NFS roads and designation of those roads, trails, and areas that are open to motor vehicle use by class of vehicle and time of use of road if appropriate (36 CFR Parts 212, 251, 261, and 295).

Strategy - Describes a road segment in terms of allowable use of and by motorized vehicles.

- "Eliminate" - the road is to be closed in a manner that will eliminate motorized vehicle access after harvest activities are complete.
- "Accept" - the road is to allow motorized vehicle use or, in some cases, stored in a manner to allow OHV use as a motorized trail.

Mode of Travel - A hierarchical list that includes all motorized and non-motorized land, snow, water, and air types of travel on roads, trails, and areas. It is used to generate the Motor Vehicle Use Maps (MVUM) and other map products and reports.

- Motorized OHV ≤50" - For example, an All-Terrain Vehicle (ATV)
- Motor Vehicle - In this case, referencing standard vehicles found on typical forest service roads.

From and Thru Dates - Describes the duration of the traffic management strategy and allowed use.

Remarks - Any additional remarks are noted in the right-hand column.

Access Objectives

Access and travel management decisions for these roads, including both opportunity and restrictions for motor vehicle use, are project-level decisions that are supported by public involvement and site-specific environmental analysis. Complete road and trail management objectives will be provided for those roads selected as part of the record of decision.

The Forest Plan establishes transportation goals, objectives, desired future conditions, suitability of land for various uses, and provides guidelines for resource protection. The Plan itself does not designate roads, trails, or areas for motor vehicle use or access. Rather, the Plan provides the management context in which travel management decisions take place. Refer to 36 CFR Parts 212, 251, 261, and 295 Travel Management; Designated Routes and Areas for Motor Vehicle Use; Final Rule.

Access and Travel Management

The current access and travel management plan (ATMP) for Wrangell Island identifies a system of roads designated for motor vehicle use, which is displayed on a motor vehicle use map (MVUM) provided for public use at the ranger district office or agency website. The management plan's four classes of vehicles include:

1. *Closed:* Designated for all use by other than motor vehicle. Roads designated as Closed are not displayed on the MVUM.
2. *Mixed Use:* Designated for use by full-sized highway-legal vehicles but also provides recreational access for other non-highway-legal vehicles. Roads designated as Mixed Use will be displayed on the MVUM.
3. *Off-Highway Vehicle Use:* Dual-designated roads closed to motorized vehicular traffic but are managed as motorized trail open to motorized off-highway vehicles 50 inches or less in width. Roads designated as Off-Highway Vehicle Use are displayed on the MVUM.

General Design Criteria

Where applicable, general design criteria are noted on the road cards.

Blasting Restrictions

During road construction, blasting operations will be designed to reduce the risk of mass failure on potentially unstable or saturated soils (BMP 14.6). Blasting and/or excavation under saturated soil conditions are restricted.

Wetland Avoidance

All newly constructed roads will avoid wetlands to the extent practicable. The practices described in BMP 12.5 will be applied to minimize impacts to wetlands where avoidance is not practicable. Prior to actual construction of roads and stream crossings, the final location, structure type, and design criteria will meet all applicable Forest Plan standards and guidelines, best management practices, and any applicable memorandums of agreement with the State of Alaska.

Aquatics/Critical Stream Crossings

National Forest System roads, if not properly designed, can divert both surface and subsurface water from flow paths that otherwise would be taken in the absence of a road. The hydrologic and geomorphic consequences resulting from these three processes will vary based on the forest road. In some cases, impacts may be negligible, while they may be significant in others.

Potential effects of forest roads that were not properly constructed or are not properly maintained on water quality include increased loading of sediment due to erosion and mass wasting; increased suspended solids and turbidity; increased sediment deposition and bed load; alteration of stream morphology and channel simplification; altered streamflow, pollution from other chemicals associated with forest roads; increased turbidity and sedimentation in drinking water systems; siltation of streambed substrates; impairments of spawning and rearing habitat; and degradation of habitat for salmonids, other fish, invertebrates, and other aquatic organisms.

Cultural Resources

Cultural resource-specific requirements are discussed in road card narratives as necessary.

Invasive Species

To prevent accidental spread of invasive plant materials, equipment cleaning requirements will follow national contract clauses, Regional Policy, and Forest Service Manual 2900-Invasive Species Management.

Recreation

Recreation resource-specific requirements are discussed in road card narratives as necessary.

Plants: Sensitive and Rare

Forest Plan standards and guidelines for plants directs that adverse impacts of management activities on sensitive and rare plant populations be avoided, minimized, or mitigated. When rare or sensitive plant species are identified in or near a proposed road corridor, a Forest Service botanist will assess the potential effects on sensitive/rare plants and if necessary recommend mitigations protect the population. Mitigation measures may include, but are not exclusive to, avoiding known sensitive/rare plant populations during project activities, and directional falling and yarding of trees in road corridors away from sensitive/rare plants. Where it is necessary to protect sensitive/rare plant species or communities from proposed road construction, a Monitoring and Evaluation Plan will be implemented, including a review of the implementation and effectiveness of conservation actions, and application of adaptive management principles.

Scenery

Scenery resource-specific requirements are discussed in road card narratives as necessary.

Silviculture

Silviculture resource-specific requirements are discussed in road card narratives as necessary.

Soils

Detailed soils resource-specific requirements are discussed in road card narratives as necessary.

Wildlife

Bald eagle nest protection requirements are now found in 50 CFR Part 22.26. Permits allowing "take" in accordance with the Bald and Golden Eagle Protection Act would have to be obtained if disturbance to nesting bald eagles would occur. The required distances to avoid disturbance to nesting eagles (March 1 through August 31) are as follows:

- Avoid clearcutting or removal of overstory trees within 330 feet (100 meters) of both active and alternate nests at any time (same as MOU).
- Avoid timber harvesting operations, including road construction and chain saw and yarding operations during the nesting season within 660 feet (200 meters) of the nest.
- Avoid construction of log transfer facilities and in-water log storage areas within 330 feet (100 meters) of active and alternate nests.
- Avoid operating helicopters or fixed-wing aircraft within 1,000 feet (305 meters) of the nest during the breeding season, except where eagles have demonstrated tolerance for such activity.
- Avoid blasting and other activities that produce extremely loud noises within 0.5 mile of nests (or within 1 mile in open areas).

Table 2. Region 10 BMP and National Core BMP Crosswalk

R10 Soil and Water Conservation Handbook	National Core	Best Management Practice
BMP 12.5	Plan 2 and 3, AqEco-2 and 4 (Wetland Identification, Evaluation and Protection)	To identify wetland functions and value, and provide appropriate protection measures designed to avoid adverse hydrologic impacts.
BMP 13.10	Veg-6 (Landings)	Design and construct landings to minimize soil erosion and water quality degradation.
BMP 14.1	Road-1 (Transportation Planning)	To assure soil and water resources are considered in transportation planning activities.
BMP 14.2	Road-2, 4, and 11 (Location of Transportation Facilities)	To assure water resources protection measures are considered when locating roads and trails.
BMP 14.3	Road-2 and 3 (Design of Transportation Facilities)	To incorporate site-specific soil and water resource protection measures into the design of roads and trails.
BMP 14.6	AqEco-2, Road-3 (Timing Restrictions for Construction Activities)	Minimize erosion potential by restricting the operating schedule and conducting operations during lower risk periods.
BMP 14.7	Road-3 (Measures to Minimize Mass Failures)	Minimize the chance and extent of road-related mass failures, including landslides and embankment slumps.
BMP 14.8	Road-3, 6, and 10 (Measures to Minimize Surface Erosion)	Minimize the erosion from cutslopes, fillslopes, and the road surface, and consequently

R10 Soil and Water Conservation Handbook	National Core	Best Management Practice
		reduce the risk of sediment production.
BMP 14.9	Road-3, 6, and 10 (Drainage Control to Minimize Erosion and Sedimentation)	Minimize the erosive effects of concentrated water flows from transportation facilities and the resulting degradation of water quality through proper design and construction of drainage control systems.
BMP 14.10	Road-3 and 7 (Pioneer Road Construction)	Minimize sediment production associated with pioneer road construction.
BMP 14.11	AqEco-2, Road-3 and 7 (Timely Erosion Control Measures for Incomplete Projects)	Minimize erosion of and sedimentation from disturbed ground on incomplete projects by completing erosion control work prior to seasonal or extended shutdowns.
BMP 14.12	Road-3 and 7 (Control of Excavation and Sidecast Material)	Minimize sedimentation from unconsolidated excavated and sidecast material caused by road construction, reconstruction, or maintenance.
BMP 14.17	AqEco-2, Road-7 (Bridge and Culvert Design and Installation)	Minimize adverse impacts on water quality, stream courses, and fisheries resources from the installation of bridges, culverts, or other stream crossings.

Road 6276

Road Number 6276			**Local System** Wrangell Island	**Land Use Designation** TP
Road Name Paw			**Beginning Terminus** Milepost 9.8, Road 6270	**End Terminus** Milepost 3.0, end
Begin MP	**End MP**	**Segment Length**	**Status**	**OBML**
0.0	2.7	2.7	Existing	ML2, Open
2.7	3.0	0.3	Planned	ML 2, Open

GENERAL DESIGN CRITERIA AND ELEMENTS

Functional Class	Level of Service	Service Life	Surface	Width	Lanes	Design Speed	Critical Vehicle	Design Vehicle	Primary Maintainer
Local	J	C	Shot rock	14	1	10	Lowboy	Log truck	FS

Intended Purpose/Future Use: The intended purpose of this road is to provide access for timber management activities in Unit 855. The road will be used for future timber management and administration and is a continuation of an existing NFS road.

MAINTENANCE CRITERIA

Begin MP	End MP	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act Class	Storage Category	Other System
0.0	2.7	2	2	Active		
2.7	3.0		2	Active		

Maintenance Narrative: Road will be maintained as "Active". Keep culverts, catch basins, ditches and ditch blocks functional. Grade as needed to maintain crown and running surface. Control roadside brush to maintain sight distance.

TRAFFIC MANGEMENT STRATEGIES ALLOWED USES

Strategy	Mode of Travel	Begin MP	End MP	From Date	Thru Date	Remarks
Accept	Motor Vehicle	2.7	3.0	1/1	12/31	

ATM: This road is part of the minimum road system necessary for the management of NFS lands.

Travel Management Narrative: During timber harvest, motor vehicle use will be discouraged due to safety considerations. All motor vehicle use will be accepted after timber harvest.

ROAD LOCATION: The road begins at the end of existing RD 6276 and is on moderate side slopes.

Site Specific Design Criteria

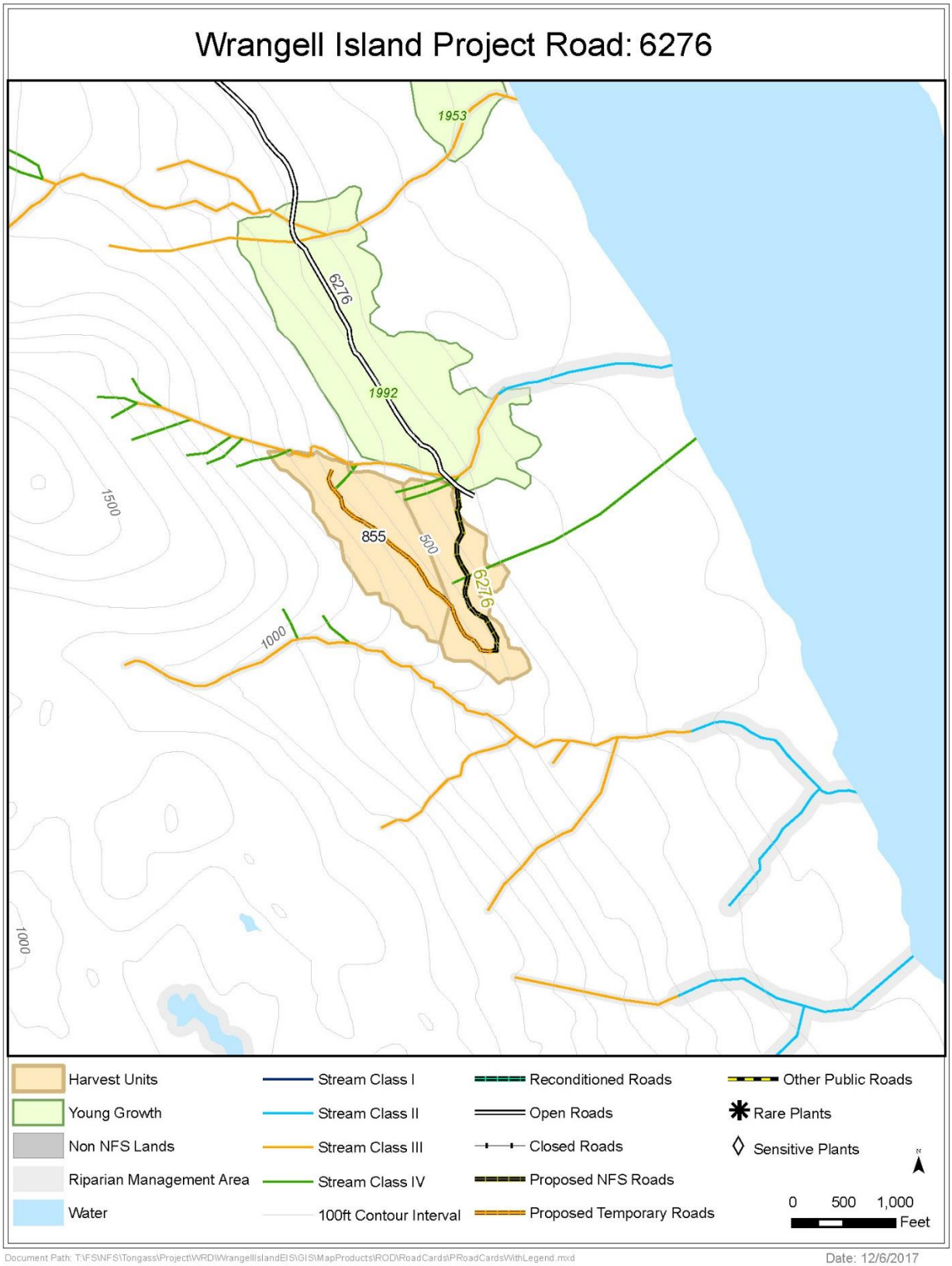
WETLAND AVOIDANCE:

The first 800 feet of road is located in wetlands. Minimize footprint. Avoid side casting into wetlands, locate landings in uplands. (BMP 12.5 and 13.10)

AQUATICS/CRITICAL STREAM CROSSINGS: No Class I, II or III stream crossings in proposed section Milepost 2.7 to 3.0. All other stream crossings are Class IV. National Core BMP Road-7 applies to all road stream crossings. A site survey will be conducted to determine the size and type of structure.

INVASIVE SPECIES: Existing road has high infestation of reed canary grass; minimize spread to the extent feasible.

NO RESOURCE SPECIFIC REQUIREMENTS: Cultural Resources, Plants, Recreation, Scenery, Silviculture, Soils, Wildlife.


Wrangell Island Project Road: 6276
1953
6276
1992
1500
855
500
6216
1000
1000
Harvest Units
Young Growth
Non NFS Lands
Riparian Management Area
Water
Stream Class I
Stream Class II
Stream Class III
Stream Class IV
100ft Contour Interval
Reconditioned Roads
Open Roads
Closed Roads
Proposed NFS Roads
Proposed Temporary Roads
Other Public Roads
Rare Plants
Sensitive Plants
N
0 500 1,000
Feet
Document Path: T:\FS\NFS\Tongass\Project\WRD\WrangellIslandEIS\GIS\MapProducts\ROD\RoadCards\PRoadCardsWithLegend.mxd
Date: 12/6/2017

Road 50024

Road Number 50024			**Local System** Wrangell Island	**Land Use Designation** TP
Road Name Barb			**Beginning Terminus** Milepost 4.5, Road 6265	**End Terminus** Milepost 2.5, end
Begin MP	**End MP**	**Segment Length**	**Status**	**OBML**
0.0	1.4	1.4	Existing	ML 2, Open
1.4	2.5	1.1	Planned	ML 1, Closed

GENERAL DESIGN CRITERIA AND ELEMENTS

Functional Class	Level of Service	Service Life	Surface	Width	Lanes	Design Speed	Critical Vehicle	Design Vehicle	Primary Maintainer
Local	J	I	Shot rock	14	1	10	Lowboy	Log Truck	FS

Intended Purpose/Future Use: The intended purpose of this road is to provide access for timber management activities in Unit 619. The road will be used for future timber management and administration and is a continuation of an existing NFS road.

MAINTENANCE CRITERIA

Begin MP	End MP	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act Class	Storage Category	Other System
0.0	1.4	2		Active		
0.0	1.4		2	Active	A	
1.4	2.5		1	Inactive	A	

Maintenance Narrative: Road will be maintained as a maintenance level 1, or “inactive”, road following harvest activities.

TRAFFIC MANGEMENT STRATEGIES ALLOWED USES

Strategy	Mode of Travel	Begin MP	End MP	From Date	Thru Date	Remarks
Eliminate	Motor Vehicle	0.0	2.5	1/1	12/31	

ATM: This road is part of the minimum road system necessary for the management of NFS lands.

Travel Management Narrative: During timber harvest, motor vehicle use will be discouraged due to safety considerations. All motor vehicle use will be eliminated after timber harvest.

ROAD LOCATION: The initial 0.6 mile of planned road is on a decommissioned road prism. The remainder of the road is on moderate to steep side slopes with two short sections requiring full bench construction and end haul.

Site Specific Design Criteria

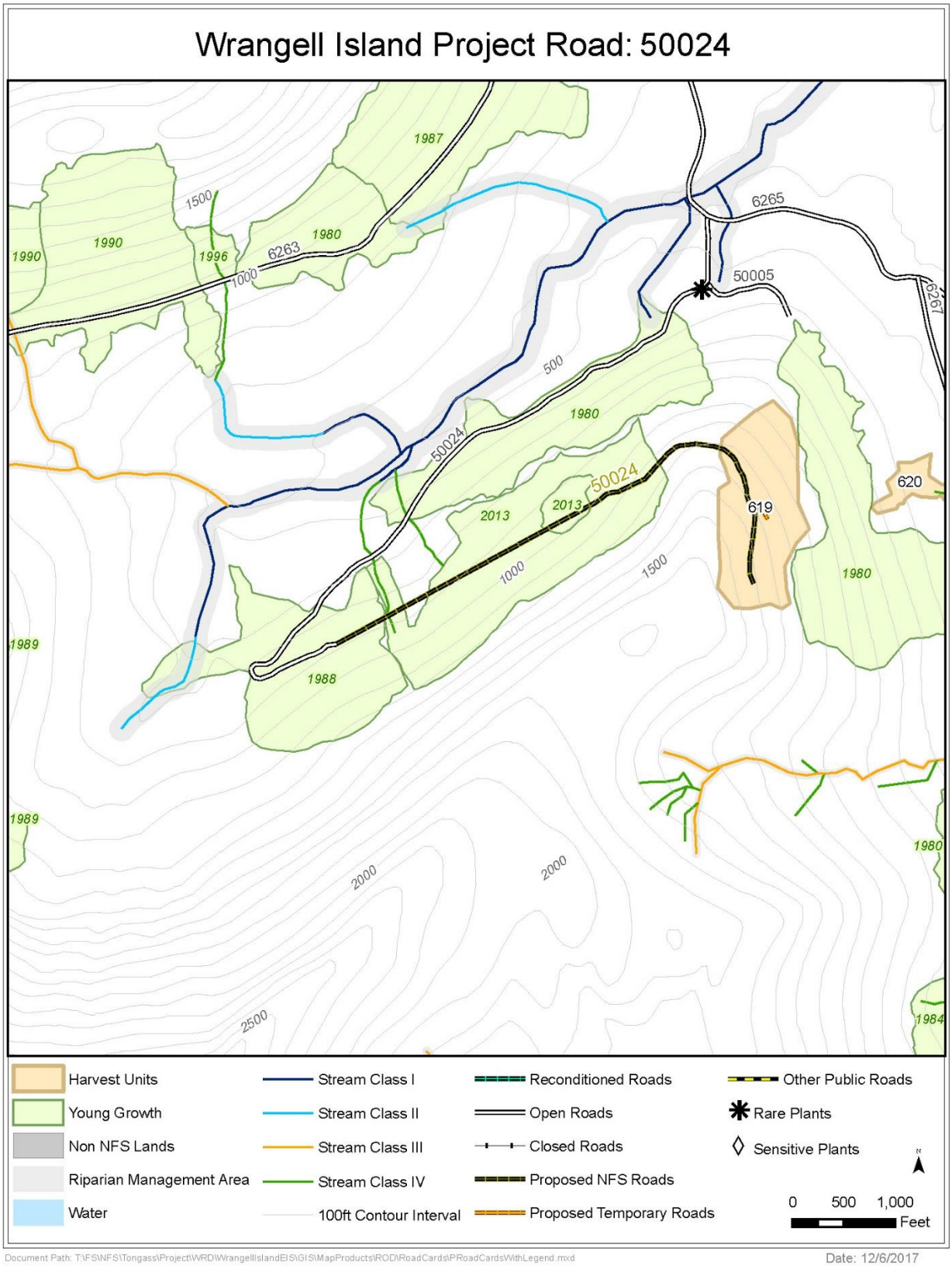
WETLAND AVOIDANCE: Road is located on existing fill from temporary road; avoid side casting or other placement of waste in wetlands where road passes through 0.23 mile of wetland (BMP 12.5).

AQUATICS/CRITICAL STREAM CROSSINGS: No Class I, II or III stream crossings. All other stream crossings are Class IV. National Core BMP Road-7 applies to all road stream crossings. A site survey will be conducted to determine the size and type of structure.

INVASIVE SPECIES: Low level infestation verify extent,prevent spread, and treat if feasible prior to closing out the road.

SOILS: Two road segments were identified for full bench construction and end haul: 15+ 05 for 160 feet and 25+47 for 340 feet. Recommend all areas with side slopes steeper than 55 percent have full bench construction and end haul (BMPs 14.3 and 14.7) No fine textured glacial deposits were identified in road recon, but landslide to the south originates in glacial till. Treat hillside as potentially unstable, during periods of high rainfall blasting operations should be suspended (BMP 14.6).

NO RESOURCE SPECIFIC REQUIREMENTS: Cultural Resources, Plants, Recreation, Scenery, Silviculture, Wildlife.


Wrangell Island Project Road: 50024
1987
1990
1990
1996
1980
1500
1000
6263
6265
50005
6267
500
1980
50024
50024
2013
2013
620
619
1000
1500
1980
1989
1988
1989
1980
2000
2000
2500
1984
Harvest Units
Young Growth
Non NFS Lands
Riparian Management Area
Water
Stream Class I
Stream Class II
Stream Class III
Stream Class IV
100ft Contour Interval
Reconditioned Roads
Open Roads
Closed Roads
Proposed NFS Roads
Proposed Temporary Roads
Other Public Roads
Rare Plants
Sensitive Plants
N
0 500 1,000
Feet
Document Path: T:\FS\NFS\Tongass\Project\WRD\WrangellIslandEIS\GIS\MapProducts\ROD\RoadCards\PRoadCardsWithLegend.mxd
Date: 12/6/2017

Road 50030

Road Number 50030			**Local System** Wrangell Island	**Land Use Designation** ML
Road Name Basin			**Beginning Terminus** Milepost 0.2, Road 6265	**End Terminus** Milepost 1.6, end
Begin MP	**End MP**	**Segment Length**	**Status**	**OBML**
0.0	0.7	0.7	Existing	ML 1, Closed
0.7	1.6	0.9	Planned	ML 1, Closed

GENERAL DESIGN CRITERIA AND ELEMENTS

Functional Class	Level of Service	Service Life	Surface	Width	Lanes	Design Speed	Critical Vehicle	Design Vehicle	Primary Maintainer
Local	J	I	Shot rock	14	1	10	Lowboy	Log Truck	FS

Intended Purpose/Future Use: The intended purpose of this road is to provide access for timber management activities in Unit 569. The road will be used for future timber management and administration and is a continuation of an existing NFS road.

MAINTENANCE CRITERIA

Begin MP	End MP	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act Class	Storage Category	Other System
0.0	0.7	1	1	Inactive	A	
0.7	1.6		1	Inactive	A	

Maintenance Narrative: The initial 0.7 mile of existing road will require reconditioning. Work required may include: ditching, cleaning or replacing culverts, brushing, surface rock replacement, or subgrade repair. The entire 1.6 miles of road (existing and proposed) will be maintained as a maintenance level 1, or "inactive", road following harvest activities.

TRAFFIC MANGEMENT STRATEGIES ALLOWED USES

Strategy	Mode of Travel	Begin MP	End MP	From Date	Thru Date	Remarks
Eliminate	Motor Vehicle	0.0	1.6	1/1	12/31	

ATM: This road is part of the minimum road system necessary for the management of NFS lands.

Travel Management Narrative: During timber harvest, motor vehicle use will be discouraged due to safety considerations. All motor vehicle use will be eliminated after timber harvest.

ROAD LOCATION: The existing road crosses one Class II stream where the replacement of the structure is required. Fish passage will be provided with the new structure. The initial 0.4 mile of planned road is located on a decommissioned road prism. The remainder of the road is on moderate to steep side slopes.

Site Specific Design Criteria

AQUATICS/CRITICAL STREAM CROSSINGS: listed below require BMP 14.6 and 14.17. All other stream crossings are Class IV. National Core BMP Road-7 applies to all road stream crossings. A site survey will be conducted to determine the size and type of structure. All fish stream crossings will meet fish passage standards.

CRITICAL STREAM CROSSINGS:

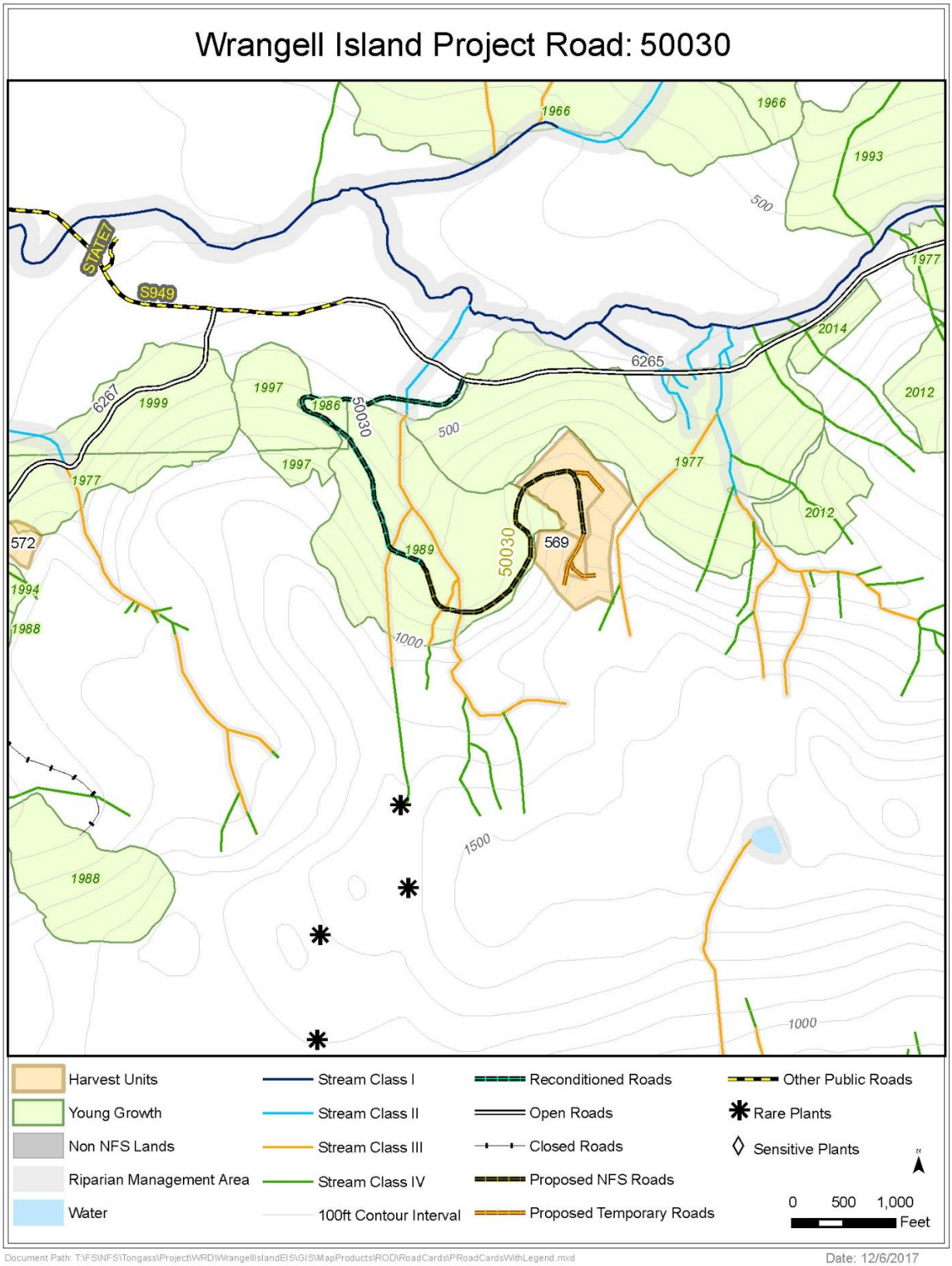
MP 0.14 **Structure:** To be determined with site visit at implementation	**AHMU Class** II **Passage** Fish	**Channel Type** HCL2 **Timing dates** July 18-Aug 15
MP 0.66 **Structure:** 48" CMP Pipe	**AHMU Class** III **Passage** Non- Fish	**Channel Type** HCO3 **Timing dates** None
MP 0.96 **Structure:** To be determined with site visit at implementation	**AHMU Class** III **Passage** Non-Fish	**Channel Type HCM3** **Timing dates** None
MP 0.99 **Structure:** To be determined with site visit at implementation	**AHMU Class** III **Passage** Non-Fish	**Channel Type** HCD3 **Timing dates** None

INVASIVE SPECIES: Low level of existing infestations; prevent spread, and treat if feasible prior to closing out the road.

SOILS: Road segments are on or adjacent to slopes mapped as having a gradient greater than 67 percent in the second growth stand. Lodgement till is mapped on the east facing hillside as road location leaves the second growth stand. Use full-bench and end-haul for approximately 200 feet on slopes over 50 percent gradient (BMPs 14.7 & 14.12). Rock walls or other structural features may be necessary to support cutbanks in this area (BMP 14.7). Road storage should include additional cross drains in this area to avoid concentrating water in any one hollow (BMP 14.9).

TRANSPORTATION: Reconditioning section all the culverts were removed and will require replacement. Approximately 14 Ditch Relief / Cross Drains, 9 Class IV, 1 Class II and 1 Class III Stream Crossings. The proposed road section has 2 Class III stream crossings.

NO RESOURCE SPECIFIC REQUIREMENTS: Cultural Resources, Recreation, Scenery, Silviculture, Plants, Wetlands, Wildlife.


Wrangell Island Project Road: 50030
STATE7
S949
6265
6267
50030
569
572
1966
1993
1977
2014
2012
1999
1997
1986
1989
1994
1988
500
1000
1500
Harvest Units
Young Growth
Non NFS Lands
Riparian Management Area
Water
Stream Class I
Stream Class II
Stream Class III
Stream Class IV
100ft Contour Interval
Reconditioned Roads
Open Roads
Closed Roads
Proposed NFS Roads
Proposed Temporary Roads
Other Public Roads
Rare Plants
Sensitive Plants
0 500 1,000
Feet
Document Path: T:\FS\NFS\Tongass\Project\WRD\WrangellIslandEIS\GIS\MapProducts\ROD\RoadCards\PRoadCardsWithLegend.mxd
Date: 12/6/2017

Road 50060

Road Number				Local System	Land Use Designation
50060				Wrangell Island	ML
Road Name				**Beginning Terminus**	**End Terminus**
Big Hollow				Milepost 1.0, Road 50054	Milepost 4.3, end
Segment	**Begin MP**	**End MP**	**Segment Length**	**Status**	**OBML**
1	3.7	4.3	0.6	Existing	ML 1, OHV

GENERAL DESIGN CRITERIA AND ELEMENTS

Functional Class	Level of Service	Service Life	Surface	Width	Lanes	Design Speed	Critical Vehicle	Design Vehicle	Primary Maintainer
Local	J	I	Shot rock	14	1	10	Lowboy	Log Truck	FS

Intended Purpose/Future Use: The intended purpose of this road reconditioning is to provide access for timber management activities in Unit 557. The road will be used for future timber management and administration.

MAINTENANCE CRITERIA

Begin MP	End MP	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act Class	Storage Category	Other System
3.7	4.3	1	1	Inactive	A	NFST

Maintenance Narrative: The last 0.6 mile of existing road will require reconditioning. Work required may include: ditching, cleaning or replacing culverts, brushing, surface rock replacement, or subgrade repair. Between mileposts 3.7 to 4.3, the existing road will be maintained as a maintenance level 1, or “inactive”, road following harvest activities.

TRAFFIC MANGEMENT STRATEGIES ALLOWED USES

Strategy	Mode of Travel	Begin MP	End MP	From Date	Thru Date	Remarks
Accept	Motorized OHV ≤ 50”	3.7	4.3	1/1	12/31	Dual designated as NFS Trail

ATM: This road is part of the minimum road system necessary for the management of NFS lands.

Travel Management Narrative: During timber harvest, motor vehicle use will be discouraged due to safety considerations. Road will be dual designated as a NFS Trail and motorized OHV, 50 inches or less in width, will be accepted following harvest activities.

ROAD LOCATION: Drainage structures remain in place, minimal work is required to make safe for haul.

Site Specific Design Criteria

WETLAND AVOIDANCE: Road will be reconstructed in existing footprint; no additional fill in wetlands.

The road crosses high elevation (1,800 feet) scrub forest wetlands between MP 3.9 and 4.2; install adequate cross drains when reconditioning (BMP 14.3).

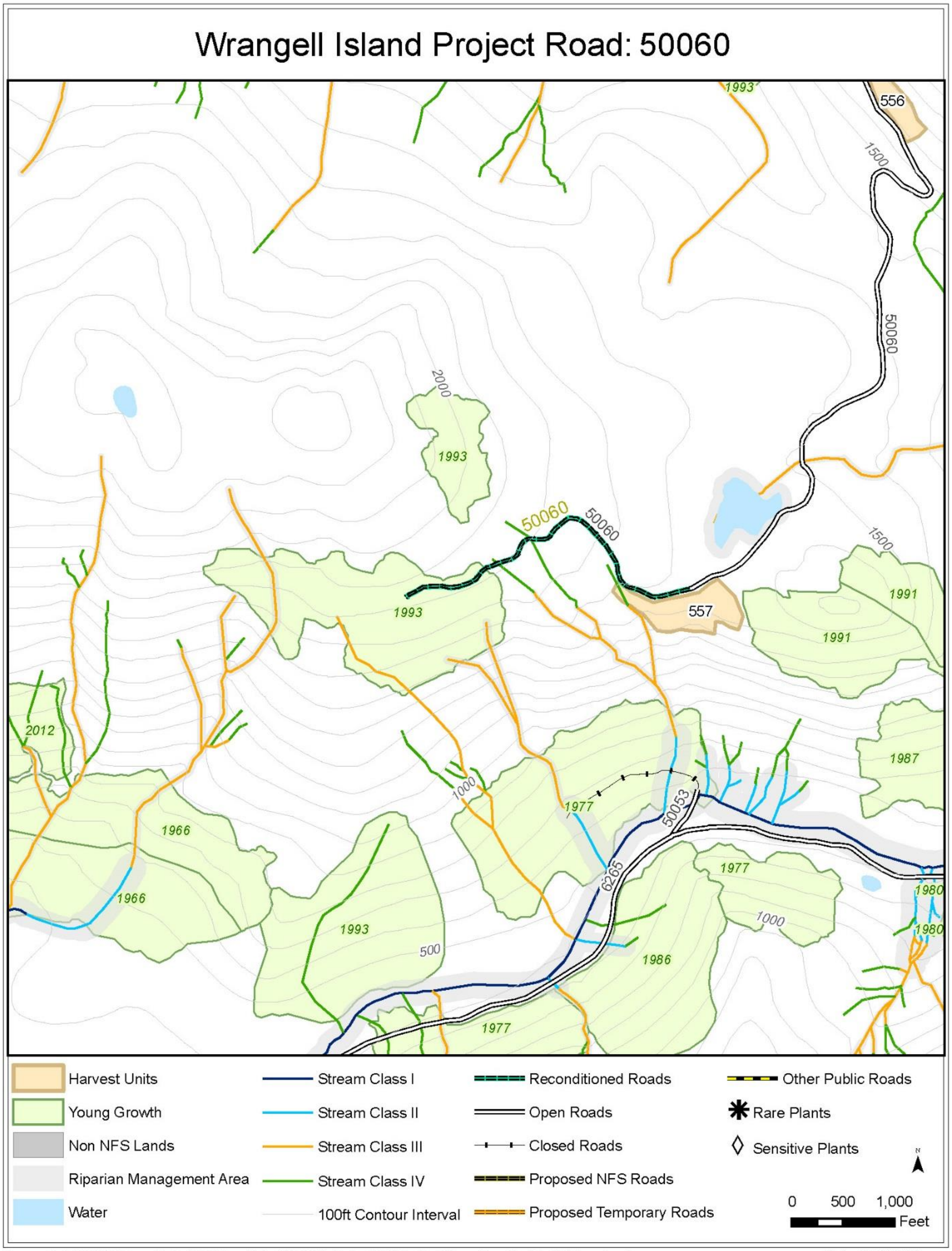
AQUATICS/CRITICAL STREAM CROSSINGS: Stream crossings are Class IV. National Core BMP Road-7 applies to all road stream crossings. A site survey will be conducted to determine the size and type of structure.

INVASIVE SPECIES: There are no known invasive plants on this road; prior to closing road eradicate any newly introduced infestations..

RECREATION: High use hunting area. Open OHV access.

NO RESOURCE SPECIFIC REQUIREMENTS: Cultural Resources, Plants, Scenery, Silviculture, Soils, Wildlife.

Wrangell Island Project Road: 50060



Document Path: T:\FS\NFS\Tongass\Project\WRD\WrangellIslandEIS\GIS\MapProducts\ROD\RoadCards\ReconditionedRoadCardsWithLegend.mxd

Date: 12/6/2017

Road 50087

Road Number 50087				**Local System** Wrangell Island	**Land Use Designation** TP
Road Name				**Beginning Terminus** Milepost 0.4, Road 6273	**End Terminus** Milepost 0.1, End
Segment	**Begin MP**	**End MP**	**Segment Length**	**Status**	**OBML**
1	0.0	0.2	0.2	Planned	ML 2, Open

GENERAL DESIGN CRITERIA AND ELEMENTS

Functional Class	Level of Service	Service Life	Surface	Width	Lanes	Design Speed	Critical Vehicle	Design Vehicle	Primary Maintainer
Local	J	C	Shot rock	14	1	10	Lowboy	Log truck	FS

Intended Purpose/Future Use: The intended purpose of this road is to provide access for timber management activities in Unit 808. The road will be used for future timber management and administration.

MAINTENANCE CRITERIA

Begin MP	End MP	Operational Maintenance Level (Current Condition)	Objective Maintenance Level (Desired Future Condition)	Alaska Forest Practices Act Class	Storage Category	Other System
0.0	0.2		2	Active		

Maintenance Narrative: Road will be maintained as "Active". Keep culverts, catch basins, ditches and ditch blocks functional. Grade as needed to maintain crown and running surface. Control roadside brush to maintain sight distance.

TRAFFIC MANGEMENT STRATEGIES ALLOWED USES

Strategy	Mode of Travel	Begin MP	End MP	From Date	Thru Date	Remarks
Accept	Motor Vehicle	0.0	0.2	1/1	12/31	

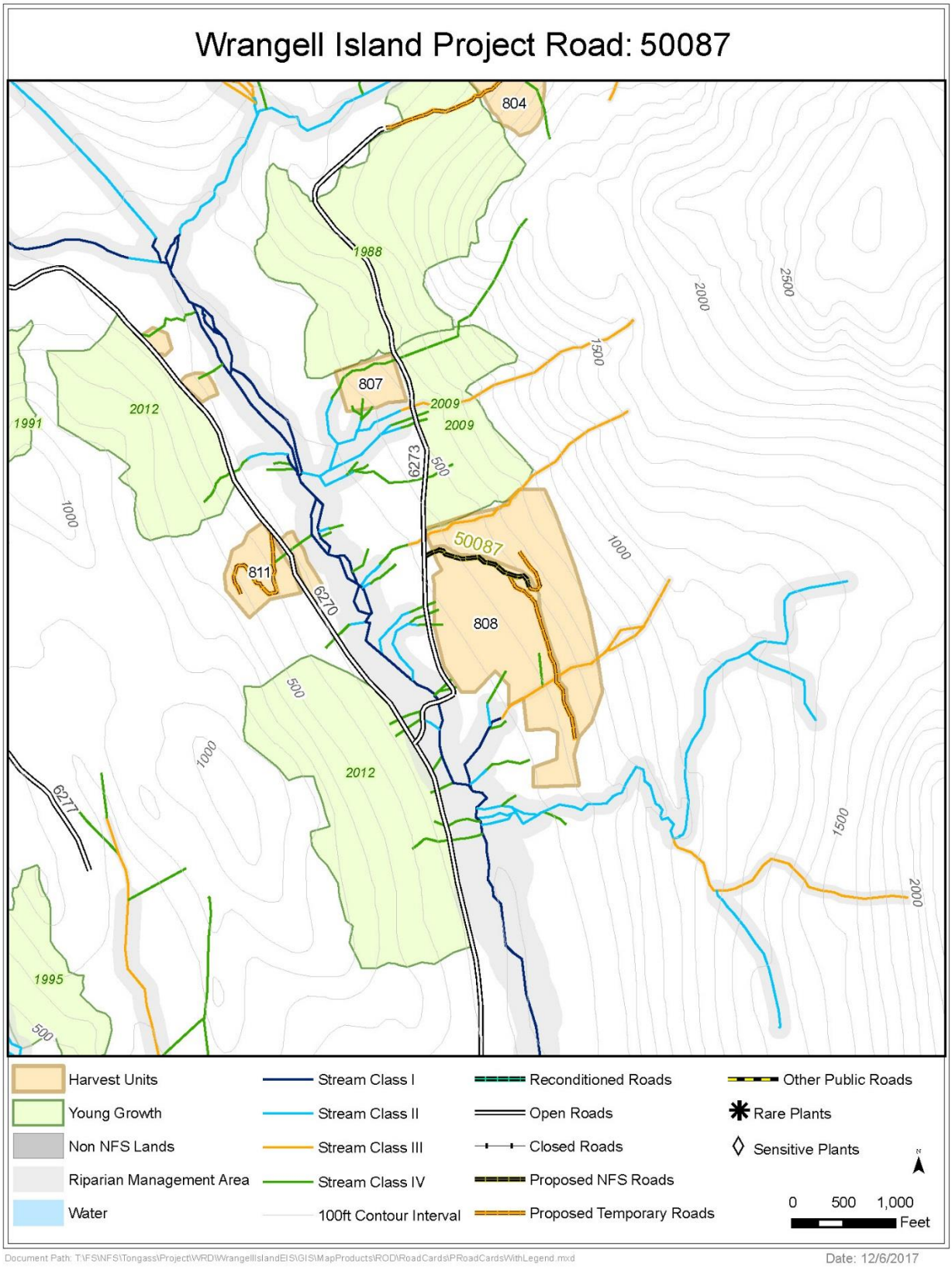
ATM: This road is part of the minimum road system necessary for the management of NFS lands.

Travel Management Narrative: During timber harvest, motor vehicle use will be discouraged due to safety considerations. All motor vehicle use will be accepted after timber harvest.

ROAD LOCATION: Road is located on gentle to moderate side slopes.

Site Specific Design Criteria

NO RESOURCE SPECIFIC REQUIREMENTS: Aquatics, Cultural Resources, Invasive Species, Plants, Recreation, Scenery, Silviculture, Soils, Wetlands, Wildlife.


Wrangell Island Project Road: 50087
804
1988
807
2012
1991
2009
2009
6273
500
1000
50087
811
6270
808
500
1000
2012
6277
1995
500
1000
1500
2000
2500
1500
2000
Harvest Units
Young Growth
Non NFS Lands
Riparian Management Area
Water
Stream Class I
Stream Class II
Stream Class III
Stream Class IV
100ft Contour Interval
Reconditioned Roads
Open Roads
Closed Roads
Proposed NFS Roads
Proposed Temporary Roads
Other Public Roads
Rare Plants
Sensitive Plants
N
0 500 1,000
Feet
Document Path: T:\FS\NFS\Tongass\Project\WRD\WrangellIslandEIS\GIS\MapProducts\ROD\RoadCards\PRoadCardsWithLegend.mxd
Date: 12/6/2017

Federal Recycling Program
Printed on Recycled Paper